



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,038	11/12/2001	Sunao Takatori	2222.6080000	1387

26111 7590 09/01/2009  
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER
----------

HALIYUR, VENKATESH N

ART UNIT	PAPER NUMBER
----------	--------------

2419

MAIL DATE	DELIVERY MODE
-----------	---------------

09/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/054,038	<b>Applicant(s)</b> TAKATORI ET AL.	
	<b>Examiner</b> VENKATESH HALIYUR	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 (2-3,6,11,17 are canceled) is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,7-9,12,13,15,16,18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 5,10,14 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on 05/22/2009 has been fully considered but is insufficient to overcome the references. Rejection follows.
2. Claims 1-23 are pending in the application. Claim 2-3, 6, 11, 17 are canceled. Claims 20-23 are new.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,4,7-9,12-13,15-16,18,20-23 are rejected under 35 U.S.C.103(a) as being unpatentable over Alfano et al [US Pat: 6,094,423] in view of Golestani [US Pat: 6,965,943].

Regarding claims 1, and 4, Alfano et al in the invention of “Wireless Protocol Method and Apparatus Supporting Transaction Requests With Variable Length Responses” disclosed a device (**Fig 6**) comprising:

a transmitter (**XMTR, item 51 of Fig 6**) configured to transmit a query to a destination communication device, the query about packet sizes that are recognizable by the destination communication device (**server, col 5, lines 45-55**).

a receiver (**RCVR, item 54 of Fig 6**) to receive information from the destination communication device (**server**), the received information corresponding to packet sizes that are recognizable by the destination communication device in response to the query (**col 5, lines 56-67, col 3, lines 25-27**).

a determining device (**processor, item 58 of Fig 6**) configured to select an appropriate packet size (**MTU, Maximum transfer unit size**) for transmission data to be packetized that reduces the amount of transmission data (**col 5, lines 45-67, col 6, lines 1-16**), the appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination communication device (**server response indicates the packet size, col 6, lines 17-23**) ; and a packet generator (**processor**) configured to packetize the transmission data based on the packet size determined by said determining device (**processor segments packets if packet size exceeds MTU, col 6, lines 24-54, Fig 7**) configured to store information with respect to the packet sizes that are recognizable by the destination device (**col 5, lines 5-17**) and further disclosed a storage device (**RAM, item 66 of Fig 6**) configured to store information with respect to the packet sizes that are recognizable

by the destination communication device (**col 5, lines 62-67, col 6, lines 1-4**). Alfano disclosed the feature of a determining device configured to select a most appropriate packet size for transmission data to be packetized which inherently suggest that transmitting varying size data packets correspondingly changes the amount of transmission data or the transmission rate, however, Golestani disclosed a method wherein a receiving size (apparatus) requests the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side (**col 3, lines 12-35**).

Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of receiving size requesting the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side as taught Golestani in the system of Alfano et al to include the feature of transmitting the most appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination communication device. One is motivated in order to provide a mechanism for the receiving side to request transmitting side to transmit data packet sizes to achieve an optimal transmission rate for error and congestion control.

Regarding claims 7, and 9, Alfano et al disclosed a method for determining packet sizes for transmission data to be packetized and transmitted from a communication terminal device (**communication device, item 50, Fig 6**) to a destination communication device (**server**), the method comprising:

transmitting (**XMTR, item 51 of Fig 6**) a query to the destination communication device, the query about packet sizes that are recognizable by the destination communication device (**server, col 5, lines 45-63**).

receiving information (**RCVR, item 54 of Fig 6**) from the destination communication device (**server**), the received information corresponding to packet sizes that are recognizable by the destination communication device in response to the query (**col 5, lines 56-67, col 6, lines 1-16, col 3, lines 25-27**).

selecting a packet size to reduce the amount of transmission data according to the received information corresponding to the packet sizes that are recognizable by the destination device (**server response indicates the packet size, col 6, lines 17-23**) and packetizing said transmission data according to the packet size selected (**processor segments packets if packet size exceeds MTU, col 6, lines 24-54**) and determining whether the information regarding packet sizes recognizable by said destination communication device (**col 5, lines 62-67, col 6, lines 1-4**) is stored in a memory of said communication terminal device (**RAM, item 66 of Fig 6, col 6, lines 5-23, col 5, lines 26-29, Fig 7**). Alfano disclosed the feature of a determining device configured to select a most appropriate packet size for transmission data to be packetized which inherently suggest that transmitting varying size data packets correspondingly changes the amount of transmission data or the transmission rate, however, Golestani disclosed a method wherein a receiving size (apparatus) requests the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side (**col 3, lines 12-35, Fig 4**). Therefore it would have been obvious for one

of the ordinary skill in the art at the time the invention was made to use the method of receiving size requesting the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side as taught Golestani in the system of Alfano et al to include the feature of transmitting the most appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination communication device. One is motivated in order to provide a mechanism for the receiving side to request transmitting side to transmit data packet sizes to achieve an optimal transmission rate for error and congestion control.

Regarding claim 8, and 13 Alfano et al disclosed transmitting said packetized transmission data from said communication terminal device to said destination communication device **(col 5, lines 45-51)**.

Regarding claims 12, and 15, Alfano et al disclosed a computer program product comprising a tangible computer readable medium having computer executable instructions recorded thereon that, if executed, enable communication terminal device to determine packet sizes for transmission data to be packetized and transmitted from the communication terminal device to a destination communication device **(items 11 and 14, Fig 1)**, the instructions comprising:

instructions for transmitting **(XMTR, item 51 of Fig 6)** a query to the destination communication device, the query about packet sizes that are recognizable by the destination communication device **(server, col 5, lines 45-55)**.

instructions for receiving information **(RCVR, item 54 of Fig 6)** from the destination communication device **(server)**, the received information corresponding to

packet sizes that are recognizable by the destination communication device in response to the query (**col 5, lines 56-67, col 3, lines 25-27**).

Instructions for selecting an appropriate packet size for transmission data to be packetized that reduces the amount of transmission data, the appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination device (**server response indicates the packet size, col 6, lines 17-23**) and instructions for packetizing said transmission data according to the packet size selected (**processor segments packets if packet size exceeds MTU, col 6, lines 24-54**) and instructions for determining whether the information regarding packet sizes recognizable by said destination communication device (**col 5, lines 62-67, col 6, lines 1-4**) is stored in a memory of said communication terminal device (**RAM, item 66 of Fig 6, col 6, lines 5-23, col 5, lines 26-29, Fig 7**). Alfano disclosed the feature of a determining device configured to select a most appropriate packet size for transmission data to be packetized which inherently suggest that transmitting varying size data packets correspondingly changes the amount of transmission data or the transmission rate, however, Golestani disclosed a method wherein a receiving size (apparatus) requests the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side (**col 3, lines 12-35, Fig 4**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of receiving size requesting the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side as taught Golestani in the system of Alfano et al to include the feature of



transmitting the most appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination communication device. One is motivated in order to provide a mechanism for the receiving side to request transmitting side to transmit data packet sizes to achieve an optimal transmission rate for error and congestion control.

Regarding claims 16, and 18, Alfano et al disclosed a communication terminal device (**communication device, item 50, Fig 6**) configured to determine packet sizes for transmission data to be packetized and transmitted to a destination communication device (**server**), the communication terminal device (**Figs 6/7**) comprising:

transmitting means configured to transmit (**XMTR, item 51 of Fig 6**) a query to the destination communication device, the query about packet sizes that are recognizable by the destination communication device (**server, col 5, lines 45-55**).

receiving means configured to receive information (**RCVR, item 54 of Fig 6**) from the destination communication device (**server**), the received information corresponding to packet sizes that are recognizable by the destination communication device in response to the query (**col 5, lines 56-67, col 3, lines 25-27**).

selecting means configured to select an appropriate packet size for transmission data to be packetized that reduces the amount of transmission data, the appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination device (**server response indicates the packet size, col 6, lines 17-23**) and packetizing means to packetize the transmission data according to the packet size selected (**processor segments packets**

**if packet size exceeds MTU, col 6, lines 24-56)** and storing means for enabling the processor to store information with respect to the packet sizes that are recognizable by the destination communication device **(RAM, item 66 of Fig 6, col 6, lines 5-23, col 5, lines 26-29, Fig 7)**. Alfano disclosed the feature of a determining device configured to select a most appropriate packet size for transmission data to be packetized which inherently suggest that transmitting varying size data packets correspondingly changes the amount of transmission data or the transmission rate, however, Golestani disclosed a method wherein a receiving size (apparatus) requests the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side **(col 3, lines 12-35, Fig 4)**. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of receiving size requesting the transmitting side to transmit data at a transmission rate that is recognizable by the receiving side as taught Golestani in the system of Alfano et al to include the feature of transmitting the most appropriate packet size being selected according to the received information corresponding to the packet sizes that are recognizable by the destination communication device. One is motivated in order to provide a mechanism for the receiving side to request transmitting side to transmit data packet sizes to achieve an optimal transmission rate for error and congestion control.

Regarding claims 20-23, wherein the appropriate packet size is further selected according to current traffic congestion of a communication media that the transmission data is to be transmitted over **(col 6, lines 24-36)**.

***Allowable Subject Matter***

5. Claims 5,10,14,19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's argument, see remarks filed on 05/29/2009 for claims 1-19 have been fully considered and based on the amendments the rejections to claims 5,10,14,19 is withdrawn and therefore is allowable as indicated in this office action.

With respect to applicant's arguments for claims 1, 7, 12,16, that Alfano fail to teach or suggest the limitation of "a determining device configured to select a most appropriate packet size for transmission data to be packetized that minimizes the amount of transmission data" and "selecting a packet size, recognizable by the destination communication device to minimize an amount of transmission data for the packet size based on data communication rates" as recited in claims 1, 7, 12, and 16, However the examiner respectfully disagrees and points applicant's to col 5, lines 45-67, col 6, lines 1-54, Fig 6 where Alfano disclosed a method for mobile device (device) processor (determining device) requesting the server to segment and send the data packets over a connection oriented connection if the data packet size is more than the maximum transfer unit (MTU) indicated by the mobile device. Therefore Alfano

Art Unit: 2419

disclosed the feature of a determining device configured to select a most appropriate packet size for transmission data to be packetized that minimizes the amount of transmission data, However, the examiner agrees that Alfano did not positively disclose the feature of selecting a packet size, recognizable by the destination communication device to minimize an amount of transmission data for the packet size based on data communication rates even though Alfano's disclosures inherently suggest that transmitting varying size data packets correspondingly changes the amount of transmission data or the transmission rate.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2419

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached @ (571)-272-3579. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

/Venkatesh Haliyur/

Examiner, Art Unit 2419

/Ayaz R. Sheikh/

Application/Control Number: 10/054,038

Page 13

Art Unit: 2419

Supervisory Patent Examiner, Art Unit 2419